

ABSTRACT OF THE DISCLOSURE

A new formulation for making a polyvinyl chloride (PVC, usually referred as vinyl in glove industry) glove has been disclosed in this invention. The resulting glove shows the following superior barrier integrity characteristics by comparing with current vinyl gloves in the market:

- Much lower in use failure rate
- Improved puncture strength and tensile strength
- Better chemical resistance

The invention provides formulations to make compounds and methods to make such gloves. The new formulations and procedures could be easily realized economically under common vinyl glove production lines. Depending on the desired applications, both powdered and powder free gloves could be produced in the same formula.